

Severe local storms, May, 1931—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
Cumberland County, Pa. (western)	19	P. m.			10,000	Severe thunder-storm.	Barn burned; many small buildings damaged.	Official, U. S. Weather Bureau.
Comanche, Tex.	19		1,760		2,500	Hail.	Crops and buildings damaged.	Do.
Terra Haute, Ind. (near)	19				1,500	Wind.	Damage to farm buildings.	Do.
Mobile, Ala.	20					Thundersquall.	Trees blown down; electric service interrupted.	Do.
Clay County, Nebr. (south-western)	21	3:30 a. m.	3 mi.		5,000	Wind.	Character of damage not reported.	Do.
Roxana to Skellytown, Tex.	21	2:30 p. m.			40,000	Tornado.	Crops and other property severely damaged.	Do.
Albany, Tex.	21	6:30 p. m.			15,000	Hail.	Buildings damaged; minor crop injury.	Do.
Cotton County, Okla.	21	7 p. m.	880-1,760		52,000	do.	Chief damage to crops; path 20 miles long.	Do.
Latimer County, Okla. (north-ern)	21	11 p. m.	2,640		3,000	do.	Some damage to crops and other property.	Do.
Virginia (southwestern)	22	2-5 p. m.	2-18 mi.		51,000	Hail and wind.	Heavy crop loss.	Do.
Victor, Dublin, and Carlton, Tex.	22	8 p. m.	9 mi.		40,000	Hail.	Crops destroyed or injured; houses damaged; poultry and lambs killed.	Do.
Anna, Ill. (near)	22					do.	Injury to property slight to severe.	Do.
Caldwell and Burke Counties, N. C.	22				50,000	do.	Crops severely damaged; roofs pierced.	Do.
Stanley County, N. C.	22					do.	Much small grain destroyed; replanting of cotton necessary; gardens total loss.	Do.
Atchison County, Kans.	24	11-12 p. m.	1,300		7,000	Hail and wind.	Injury chiefly to apples, pears, and gardens; path 3 miles long.	Do.
Waukesha and Racine Coun-ties, Wis.	24		10 mi.		5,000	Hail.	Roofs damaged; trees blown down; fruit in-jured.	Do.
Snyder, Tex.	25	4 p. m.			3,000	do.	Crops damaged.	Do.
Lancaster, Ohio.	25	4:30 p. m.				Probably tornado.	Character of damage not reported.	Do.
Crozet, Va., and vicinity.	26	2:30-6:30 p. m.	1,760		40,000	Hail.	Trees, fruits, and gardens severely hurt; path 7 miles long.	Do.
Moorhead (10 miles southeast) to Gary, Minn.	27	4:15 p. m.		2	200,000	Tornado.	Passenger train lifted from rails; several build-ings wrecked; farm machinery damaged; livestock injured or killed; some fields re-quire replanting; 57 persons injured; path 40 miles long.	Do.
Jewell, Rooks, and Osborne Counties, Kans.	27	8-11 p. m.				Hail.	Damage chiefly to wheat.	Do.
Thomas and Grady Counties, Ga.	27				2,000	do.	Crops injured over path several miles long.	Do.
Harlan County, Nebr.	28	2 a. m.	1-2 mi.		75,000	Wind.	20 barns damaged; many windmills wrecked; path 30 miles long.	Do.
Scott County, Iowa.	28	2:30 p. m.	490		2,500	Tornado and wind.	Character of damage not reported; path 2 miles long.	Do.
Des Moines County, Iowa.	28	3 p. m.				Tornado and hail.	No details reported; path 4 miles long.	Do.
Oneida, Ill.	28	4:30 p. m.			5,000	Wind.	Buildings damaged; trees uprooted.	Do.
Galva, Ill. (south).	28					Severe thunder-storm and wind.	Farm buildings blown down or unroofed; trees uprooted.	Do.
Dawson, N. Mex.	29	2:30-3:30 p. m.	2 mi.		1,000	Hail.	Gardens and flowers ruined; too early for crops.	Do.
Field, N. Mex. (near)	29	2-6 p. m.	6 mi.		21,000	do.	Severe damage, character not reported.	Do.
Charlottesville, Va. (near)	30	3:05 p. m.	1,500		9,000	Tornado.	Chief damage to airplane hangar and 3 planes.	Do.
Grove City, Pa.	30	6 p. m.	100		5,000	Thundersquall.	College buildings damaged.	Do.
Bradford County, Pa.	30	P. m.				Thunderstorm and wind.	Damage chiefly to crops.	Do.

RIVERS AND FLOODS

Table of flood stages in May, 1931

By MONTROSE W. HAYES, in charge River and Flood Division

Overflows in the southern part of the Atlantic slope drainage caused miscellaneous damage to the extent of about \$8,000. Timely forecasts were issued and were generally heeded, which reduced the losses to a minimum.

Minor local floods in the Kansas, Canadian, Guadalupe, Pecos, and Colorado Basins caused no damage of consequence.

Stages are very low throughout most of the Mississippi River system, and many stations report the lowest of record for May. Streams are also low in the Pacific slope drainage.

Final reports of the overflows in the Columbia River Basin in March and April indicate the flood damage was about \$10,000 along streams where a flood-warning service is maintained. Along streams where there is no warning service the damage amounted to about \$50,000. Savings effected through the warnings were estimated at \$25,000. At Walla Walla, Wash., there was a severe flood in Mill Creek, destroying or damaging property to the extent of \$500,000.

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE					
	<i>Feet</i>			<i>Feet</i>	
Tar: Rocky Mount, N. C.....	9	10	10	9.0	10
Neuse: Smithfield, N. C.....	14	24	26	14.8	25
Cape Fear: Elizabethtown, N. C.....	22	23	26	26.6	24
Pee Dee:					
Cheraw, S. C.....	27	23	24	28.6	23
Mars Bluff Bridge, S. C.....	17	25	29	18.4	27
Saluda: Pelzer, S. C.....	7	21	22	7.4	22
Santee: Rimini, S. C.....	12	9	10	12.0	10
Oconee: Milledgeville, Ga.....	22	24	27	12.7	27
Altamaha: Charlotte, Ga.....	15	5	5	23.5	5
		13	15	15.4	14
MISSISSIPPI SYSTEM					
Missouri Basin.....					
Solomon: Beliot, Kans.....	18	6	6	20.4	6
Republican: Concordia, Kans.....	8	5	5	8.3	5
Arkansas Basin.....					
Canadian: Logan, N. Mex.....	4	2	2	5.6	2
		4	4	5.0	4
		30	30	6.0	30
WEST GULF OF MEXICO DRAINAGE					
Guadalupe: Victoria, Tex.....	16	5	5	16.2	5
Pecos: Pecos, Tex.....	11	1	2	11.6	1
		5	5	11.0	5
GULF OF CALIFORNIA DRAINAGE					
Colorado: Parker, Ariz.....	7	24	31	7.9	25-26